

## **REMARKS**

### **I. Introduction**

Claims 1 and 2 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that the presently pending claims are allowable, and reconsideration is respectfully requested.

Regarding Applicants' claim for foreign priority, the Examiner will note that certified copies of German Patent Application No. 10314984.8 and German Patent Application No. 102004010498.0 are submitted herewith.

### **II. Objection to Claim 2**

Regarding the objection to claim 2, the Examiner will note that this claim has been amended, inter alia, to change the term "the coating" to --the outer functional layer of the coating--, thereby obviating the objection. Accordingly, withdrawal of this objection is respectfully requested.

### **III. Rejection of Claims 1 to 2 Under 35 U.S.C. § 102(b)**

Claims 1 to 2 were rejected under 35 U.S.C. § 102(b) as anticipated by German Published Application No. 100 18 143 ("Massler et al."). It is respectfully submitted that Massler et al. does not anticipate these claims for at least the following reasons.

Claim 1 relates to a pump device, including: at least one of: i) a piston and ii) sealing elements to seal the pump piston, the at least one of the pump piston and sealing elements having a coating containing at least one of i) halogen-, ii) silicon-, iii) carbon-containing, and iv) metal-organic monomers; the coating including: an inner adhesive layer including one of a) chromium, and b) silicon; at least one intermediate layer including one of a) chromium, b) tungsten, c) silicon, and d) carbon; and one of a) an outer, metal-free functional layer of diamond-like carbon (DLC), and b) an outer, metal-containing functional layer including tungsten carbide.

Although Applicants may not agree with the merits of the rejection, to facilitate matters, claim 1 has been amended to recite, in relevant part, that **the coating includes an outer, metal-containing functional layer including tungsten**

carbide, and claim 2 has been amended to recite that the outer functional layer of the coating includes diamond-like carbon.

Massler et al. does not disclose, or even suggest, the above-mentioned feature of claim 1. U.S. Patent No. 7,160,616 ("Massler et al. (II)"), which issued from the U.S. National Stage of PCT Application No. PCT/EP00/13299, which in turn claims priority from Massler et al., describes a layer system including an adhesion layer arranged on a substrate, a transition layer arranged on the adhesion layer and a covering layer of diamond-like carbon. The adhesion layer includes at least one element of the group of elements that contains the elements of the fourth, fifth and sixth subgroup of the periodic table and silicon, the transition layer includes carbon and at least one element of the above-mentioned groups, and the covering layer consists essentially of diamond-like carbon. However, **the covering layer of Massler et al. (II), which is the outermost layer of the layer system, does not contain any metal or tungsten carbide.** In addition, in column 3, lines 28 to 32, Massler et al. (II) indicate that U.S. Patent No. 5,707,748 ("Bergmann") describes a layer combination consisting of metal-containing hard material layers (TiN, TiAlVN, WC) and a less hard, metal carbide layer with graphitically bonded carbon, the latter layer being referred to by Bergmann as a friction reducing layer. However, **as is apparent from the disclosure of Bergmann, the metal-containing hard material layer is always an inner layer bonded to a surface of a tool, and the metal-carbide/carbon layer is an outer layer. In addition, contrary to the contentions appearing in column 3, lines 28 to 32 of Massler et al. (II), Bergmann nowhere mentions that tungsten carbide is present in the metal-containing hard material layers, but only indicates that tungsten carbide may be present, along with carbon, in the outer, metal-free friction reducing layer (see, for example, claim 9 of Bergmann).** Accordingly, it is respectfully submitted that Massler et al. do not anticipate claim 1 for at least these reasons.

Claim 2 depends from claim 1 and therefore includes all of the features of claim 1. Accordingly, it is respectfully submitted that Massler et al. do not anticipate claim 2 for at least the reasons set forth above.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

#### IV. Conclusion

In light of the foregoing, Applicants respectfully submit that all pending claims are in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited.

Respectfully submitted,

Dated: November 7, 2008

By: /Clifford A. Ulrich, Reg. No. 42,194/  
Clifford A. Ulrich

for Gerard A. Messina (Reg. No. 35,952)

KENYON & KENYON LLP  
One Broadway  
New York, NY 10004  
Telephone: (212) 425-7200  
Facsimile: (212) 425-5288  
**CUSTOMER NO. 26646**